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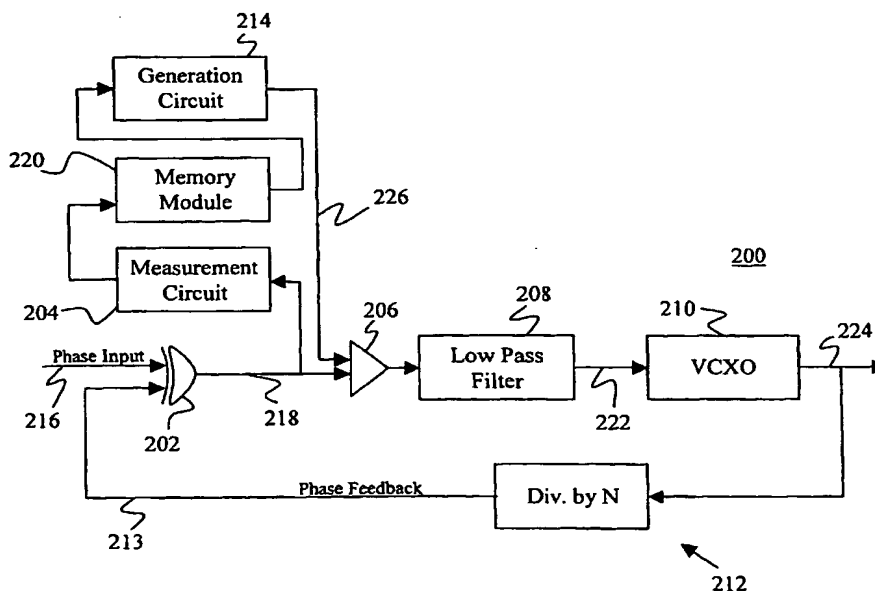
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(54) Title: **SYSTEM AND METHOD FOR MAINTAINING AN ACCURATE FREQUENCY ON A VOLTAGE CONTROLLED OSCILLATOR**



(57) Abstract: A method for phase-locking a voltage controlled oscillator is disclosed. The method comprises receiving, at a phase detector, a phase input signal and a phase feedback signal from the voltage controlled oscillator; measuring a pulse width property of an error signal output from the phase detector to obtain a pulse width property measurement; storing the pulse width property measurement in a memory; and generating a new signal from the stored pulse width property measurement to phase-lock the voltage controlled oscillator. The method of the present invention may be used to calibrate a clock, in clock holdover and in qualification of clock sources.

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